

CLAIMS

1 1. A power delivery system, comprising:
2 a power converter; and
3 a land grid array socket mounted to an array of contacts on a surface of the power
4 converter corresponding to an array of contacts on the land grid array socket.

1 2. The power delivery system of Claim 1 wherein the array of contacts on the power
2 converter and the array of contacts on the land grid array socket are contact pads
3 fabricated from electrically conductive material.

1 3. The power delivery system of Claim 1 wherein the land grid array socket is
2 electrically coupled to a printed circuit board and includes an integrated circuit device
3 mounted to a land grid array package.

1 4. The power delivery system of Claim 1 wherein the power converter converts
2 voltage received from a power supply to a lower voltage and transmits the lower voltage
3 to the land grid array socket.

1 5. The power delivery system of Claim 1 wherein the land grid array socket is
2 mounted to the power converter and to a printed circuit board using a single direction of
3 assembly and compression contact technology.

1 6. A power delivery system, comprising:
2 a power converter;

3 a printed circuit board; and
4 a land grid array socket mounted to an array of contacts on a surface of the power
5 converter and on a surface of the printed circuit board using a single direction of
6 assembly.

1 7. The power delivery system of Claim 6 wherein the array of contacts on the power
2 converter and on the printed circuit board correspond to an array of contacts on the land
3 grid array socket, the array of contacts fabricated from electrically conductive material.

1 8. The power delivery system of Claim 6 wherein the land grid array socket includes
2 an integrated circuit device mounted to a land grid array package.

1 9. The power delivery system of Claim 6 wherein the power converter converts
2 voltage received from a power supply to a lower voltage and transmits the lower voltage
3 to the land grid array socket.

1 10. The power delivery system of Claim 6 wherein the land grid array socket is
2 mounted to the power converter and to the printed circuit board using compression
3 contact technology.

1 11. A method of mounting a land grid array socket to a power converter, the method
2 comprising:
3 providing an array of contacts on a surface of the power converter;

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4 providing an array of contacts on a land grid array socket interface corresponding
5 to the array of contacts on the power converter;

6 mounting the land grid array socket to the power converter by vertically
7 compressing the array of contacts on the land grid array socket interface with the array of
8 contacts on the surface of the power converter.

1 12. The method of Claim 11 wherein the step of mounting the land grid array socket
2 to the power converter provides an electrical connection between the land grid array
3 socket and the power converter.

1 13. The method of Claim 11 wherein the land grid array socket includes an integrated
2 circuit device mounted to a land grid array package.

1 14. The method of Claim 11 wherein the step of mounting the land grid array socket
2 to the power converter further comprises the step of mounting the land grid array socket
3 to a printed circuit board by vertically compressing an array of contacts on the land grid
4 array socket with an array of corresponding contacts on the printed circuit board.

1 15. The method of Claim 14 wherein the step of mounting the land grid array socket
2 to the printed circuit board provides an electrical connection between the land grid array
3 socket and the printed circuit board.

1 16. The method of Claim 11 wherein the step of mounting the land grid array socket
2 to the printed circuit board further comprises the step of mounting the land grid array
3 socket to a retention mechanism, the array of contacts on the land grid array socket

4 mounted to the array of contacts on the printed circuit board through a relief in the
5 retention mechanism.

1 17. The method of Claim 11 wherein the land grid array socket serves as a retention
2 mechanism to hold the land grid array socket in proper alignment with the printed circuit
3 board and in proper alignment with the power converter.

1 18. The method of Claim 11 wherein the power converter converts voltage received
2 from a power supply to a lower voltage and transmits the lower voltage to the land grid
3 array socket